

THE *PLACIDA* GROUP OF THE GENUS *ALETIA* HÜBNER,
WITH DESCRIPTIONS OF TWO NEW SPECIES
(LEPIDOPTERA : NOCTUIDAE, HADENINAE)

SHIGERO SUGI

41-3, Akadutumi 5 chome, Setagaya-ku, TOKYO, 156

Synopsis. The *placida* group of the genus *Aletia* Hübner is defined by the genitalic characters to place *A. placida* (Butler, 1878) and its two new allies, *A. subplacida* **sp. nov.** from Taiwan and *A. bani* **sp. nov.** from Japan, which are described here.

The genus *Aletia* Hübner, [1821], as redefined by Franclemont (1951) and later more extensively discussed by Carola (1966), is the largest assemblage of the Old World *Mythimna-Leucania* complex. The genus is fairly discriminated in having the developed diffuse corona on the cucullus of male genitalia and represents a natural unit, but there are possibilities to divide it further into moderately sized species groups, mainly on the basis of more detailed features of male and female genitalia. The nature of the inner sac of male aedeagus and its armature will be one of the most useful primary characters.

The *placida* group

The *placida* group, as presently recognized, is a small group of the genus, confined to Northeast temperate Asia, and consists of only three species, *placida* (Butler) itself and two new species described below. These species are relatively large to largest moths of the genus, stoutly built and showing rather even or less striated appearance of forewing. In the male genitalia, the *placida* group is distinct in having very long and strongly ventrally elbowed arm to cucullus, but shares much with certain species or species groups within the genus, or with the component of genera *Mythimna* Ochseneimer and *Pseudaletia* Franclemont in the vesical structure and the corresponding parts in the female. The genitalic characters are as follows.

Male. Uncus well developed, stout, somewhat raised and thickly setose dorsally. Tegumen narrow, elongate. Valves with base of cucullus remarkably elongated and strongly elbowed ventrally; cucullus spatulate with diffused corona composed of more or less heavy spines. Valve proper strongly bulged laterally, or abruptly produced (in one species); ampulla and harpe rather moderate. Aedeagus rather short and robust, bulbous at proximal 2/5 to receive tightly packed vesica, which, when everted, is tube-like, a few times as long as the length of aedeagus and armed with a dense series of spinules in nearly entire length, associated with a longer spine at the apical end of the series.

Female. Ovipositor lobes typical for the genus. Ductus bursae long, fully sclerotized and closely ridged anteriorly towards appendix bursae, which runs posteriorly to a length nearly equal to 3/5 of the length of ductus bursae, then strongly recurved anteriorly, ending in a terminal membranous sac.

Aletia placida (Butler, 1878)

(Fig. 1)

Mythimna placida Butler, 1878a : 79 ; Butler, 1878b : 21, pl. 28 : 5.

Cirphis placida Butler : Hampson, 1905 : 552.

Sideridis placida Butler : Warren, 1910 : 100, pl. 25 : e.

Aletia placida Butler : Inoue & Sugi, 1958 : 472.

Expanse 42-50 mm. Forewing markedly tinged with light yellowish. Reniform with fuscous points in it at angles of cell, the upper one often untraceable, without additional points posterior to the lower. Hindwing much darker than in the following two species, well contrasting with the paler colour of cilia.

Male genitalia (Fig. 4, 5). Valves strongly bulged laterally, with ventral margin smoothly curved; costa incurved at base, cucullus supported by heavier arm, corona more extensive, consisting of somewhat stouter spines. Dorsal process of harpe moderate, ampulla moderately long, obliquely beyond ventral margin of valve.

Female genitalia (Fig. 11). Appendix bursae heavier than the following two species, abruptly recurved at middle, terminating in a dilated sac, which is not shoe-like.

Specimens examined. 8♂, 6♀ from Japan.

Distribution. Japan, Korea, central to west China.

Remarks. This species is common nearly throughout in Japan. A remarkable specimen illustrated by Draudt (1950: 54, pl. 4: 6) as *Cirphis placida* f. *suavis* Draudt from China may very probably represent a distinct species to be associated with the *placida* group.

Aletia subplacida sp. nov.

(Fig. 2)

Expanse 45-48 mm. The ground colour of forewing rather olivaceous grey instead of light straw-yellow in *placida*; subbasal line usually represented by a dark stria at costa, antemedian line by dark points at costa and on veins, which are often joined in turn by fuscous sinuous line; reniform paler than the ground colour, its posterior edge minutely angulated inward, containing two black points in it at angles of cell, the upper one often untraceable, with two additional points just posterior to the lower in the base of cellules; the dark shade posterior to reniform heavier than in *placida*; postmedian line represented by a dark point at costa, dark loose stria obliquely outward from it, then acutely angled to the cell-end dark shade; a postmedian series of fuscous points at veins; subterminal dark shade above vein 4, defined anteriorly oblique from apex; terminal series of fuscous points more distinct than in *placida*. Cilia concolorous. Hindwing uniformly grey brown, with veins infuscated and lunar discoidal point obscure. Cilia greyish yellow with fuscous median line.

Male genitalia (Fig. 6, 7). Generally similar to those of *placida*. Cucullus and valve proper moderate, costa less incurved, coronal spines slenderer and less extensive than in *placida*; dorsal process of harpe longer than in *placida*, ampulla shorter, bluntly pointed at apex.

Female genitalia (Fig. 12). Ductus bursae and appendix bursae somewhat longer and slenderer than in *placida*, the latter smoothly recurved at middle, terminating in a shoe-like tail sac.

Holotype. ♂, "Musha" [Wushe], 14. iii. 1966 (I. Kishida). Genitalia slide SS.-2546. To be deposited in the collection of National Science Museum, Tokyo.

Paratypes. Yangminshan, 1♀, 6. iii. 1970 (S. Sakurai). "Musha" [Wushe], 1♂, 21. iii. 1967 (T. Miyashita); 1♂ (ex J. Okura). Rushan-Unchen [Lushan Spa], 9♂2♀, 19-21. iii. 1972 (M. Owada), 2♂3♀, 3-6. iv. 1972 (M. Owada), 3♂1♀, 6. viii. 1974 (Y. Kishida). Fenchihu, 1600 m, 1♀, 12-13. vii. 1964 (H. Inoue), 1♂, 22. vi. 1970 (Y. Kishida), 1♀, 23-24. iv. 1973 (M. Owada). Alishan, 2200 m, 1♀, 9-11. vii. 1964 (H. Inoue). Karaping, 2♂, 29. iii. 1972 (M. Owada). "Formosa", no exact data, 1♀.

The paratypes are at present in the collections of Mr. M. Owada, Mr. Y. Kishida and Sugi.

Distribution. Taiwan.

Remarks. Apparently the present new species is a representation of *placida* in the island of Taiwan, where it is common. The male genitalia show its affinity with *placida*, though the female genitalia are similar to those of the following species.

Aletia bani sp. nov.

(Fig. 3)

Leucania sp. Tanaka et al., 1973; 64, pl. 1: 8 (♀) [Three habitats in Aichi Pref.]

Leucania sp. Yamamoto, 1975: 345, fig. 5 (♂) [Mt. Sabatsubo-yama in Shizuoka Pref.]

Expanse 48-53 mm. A markedly larger species. The ground colour of forewing olivaceous grey, nearly similar to that of the preceding species; slightly irrorated with fuscous toward posterior half; subbasal line wanting, ante- and postmedian lines not represented in costal area, the former often reduced into three dark points on veins; reniform pale, containing three or four points in it arranged exactly as in the preceding species but the points somewhat finer; the dark shade posterior to it moderate; postmedian line represented by a series of fine fuscous points at veins, slightly incurved to vein 4, then nearly oblique toward posterior margin, with a fine sinuous line before it; subterminal space slightly tinged with fuscous, defined above oblique from apex to vein 4; a terminal series of fuscous points at veins; cilia concolorous. Hindwing greyish fuscous, markedly paler than in *placida*, with veins somewhat infuscated, darker toward termen; cilia fuscous yellow.

Male genitalia (Fig. 8, 9). Differ from the preceding two species in the abruptly produced lateral flap of valve, well developed dorsal process of harpe with wider base and much reduced ampulla.

Female genitalia (Fig. 10.) Almost similar to those of the preceding species; ductus bursae and appendix bursae somewhat shorter.

Holotype. ♂, Mt. Sobatsubo-yama, 1400 m, Naka-Kawane, Shizuoka Pref., 1. viii. 1972 (T. Yamamoto). To be deposited in the collection of National Science Museum, Tokyo.

Paratypes. The type-locality, 1♀, 30. vii. 1971; 6♂4♀, 1. viii. 1972; 1♂, 25. vii. 1973 (T. Yamamoto). Iyama, 800 m, Inabu-chô, Aichi Pref., 3♀, 20. vii. 1968 (B. Tanaka). Uradani, 900 m, Shitara-chô, Aichi Pref., 1♀, 27. vii. 1968; 1♀, 30. vii. 1972; 1♀, 4. viii. 1973 (B. Tanaka), Mt. Chausu, 1415 m, 1♂, 13. vii. 1971 (Y. Ichimi). In the collection of Messrs. B. Tanaka and T. Yamamoto and S. Sugi. Fukusada, Sekinomiya, Hyôgo Pref., 1♀, 17. vii. 1972 (M. Yuma). In the collection of Mr. M. Tôyama. Hikosan, Fukuoka Pref., 1♀, 4. vii. 1956 (H. Kuroko). In the collection of Dr. H. Kuroko.

Distribution. Japan.

Remarks. The present new species appears to be extremely local, the habitats of the type materials concentrating within the limited areas associated with southern extension of the Kiso and Akaishi Mountain ranges, running from north to south in central Honshu. Two habitats fairly distant westward are also recorded. It was surprising that this largest, remarkable species of *Aletia* had escaped collectors' eye till the latter half of the 1960's.

It is with my great pleasure to name this new species after my esteemed friend, Mr. Ban Tanaka, Toyota, to whom its unexpected discovery is greatly owed.

Acknowledgements

I wish to express my deep gratitude to Mr. B. Tanaka and Mr. T. Yamamoto, both of whom are so kind in offering me their valuable materials for description. I would like to thank to Dr. H. Inoue, Messrs. I. Kishida, Y. Kishida, T. Miyashita, M. Owada and S. Sakurai, for their help in the Taiwanese specimens.

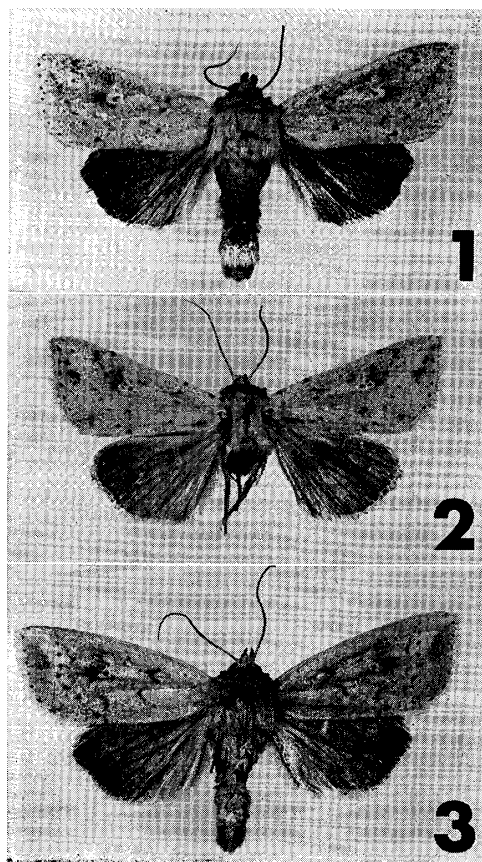


Fig. 1-3 *Aletia-placida* group. 1. *A. placida* (Butler), ♂, Japan. 2. *A. subplacida* sp. nov., ♂, holotype, Taiwan. 3. *A. bani* sp. nov., ♂, holotype, Japan.

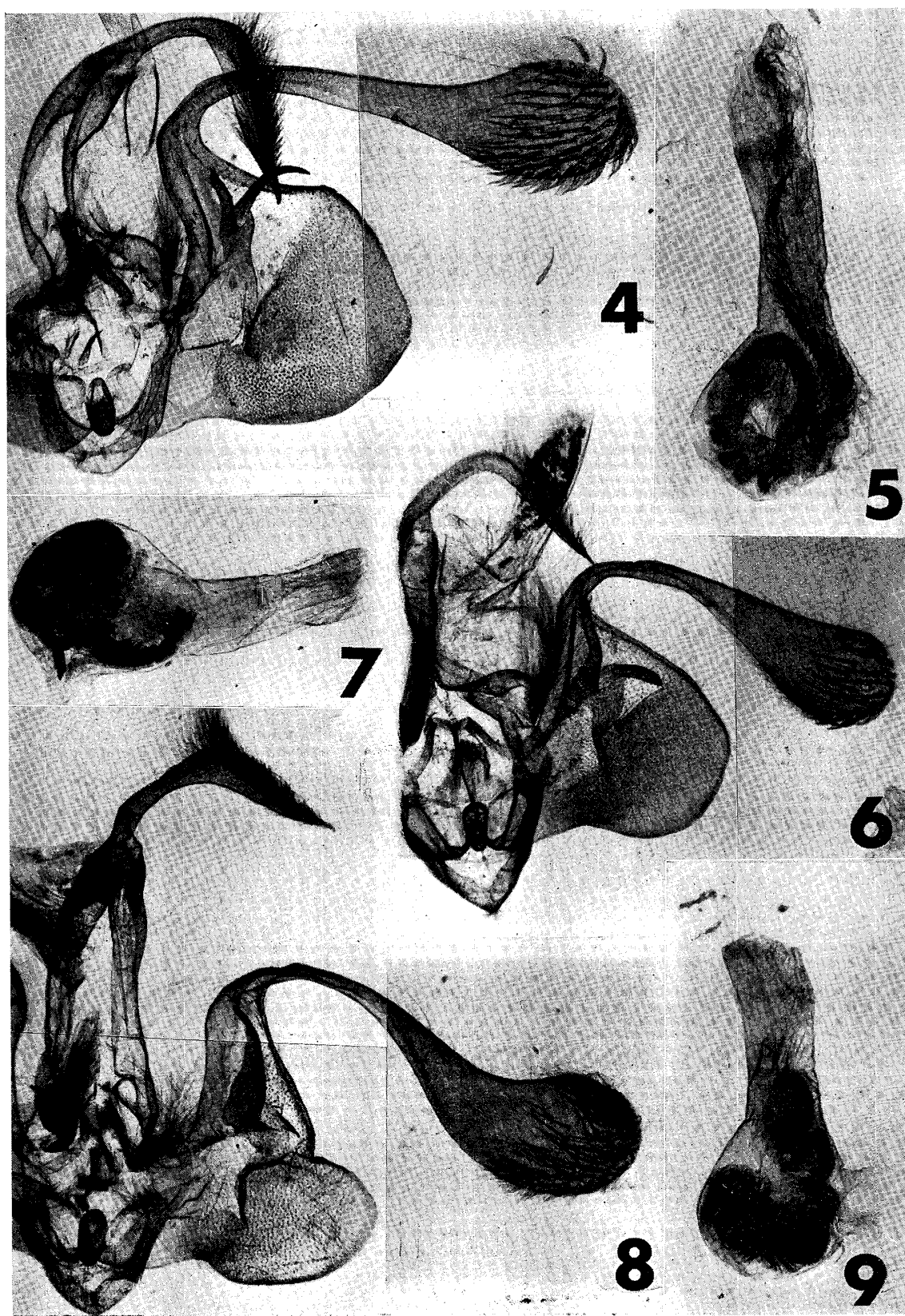


Fig. 4-9 Male genitalia and aedeagus of *Aletia-placida* group. 4, 5. *A. placida* (Butler), slide SS-1044. 6, 7. *A. subplacida* sp. nov., slide SS-2546 & 460. 8, 9. *A. bani* sp. nov., slide SS-2215.

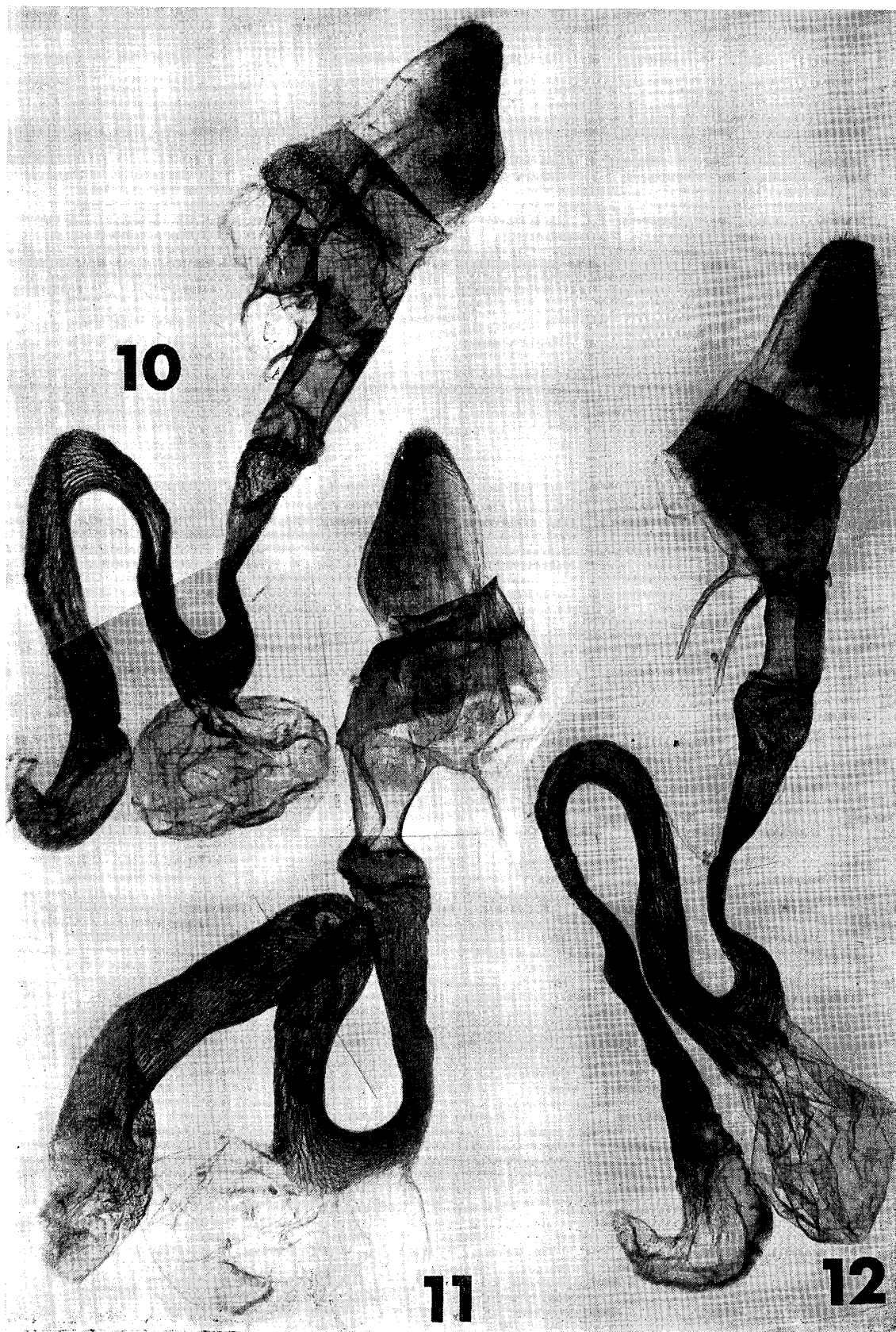


Fig. 10-12 Female genitalia of *Aletia-placida* group. 10. *A. bani* sp. nov., slide SS-2214. 11. *A. placida* (Butler), slide SS-1045. 12. *A. subplacida* sp. nov., slide SS-2545.

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摘 要

Aletia placida (Butler) クロシタキヨトウに近縁の2新種を記載し、それら3種を含む小群を *placida* group としてまとめた。

Aletia subplacida sp. nov. 台湾. 本種は台湾における *placida* の代置種とみなし得る。

Aletia bani sp. nov. ミカワキヨトウ. この日本最大の開張を示す大型の *Aletia* は、1968年に初めて愛知県奥三河の山地で発見され、同地方で3カ所の産地が知られている(田中・羽瀧・山田, 1973). 続いて1971年には静岡県大井川中流部にも分布することが発見された(山元, 1975). これらの地方では比較的多産する. 私はさらに兵庫県および福岡県下で得られた各1標本を見ているので、本種の既知産地を和文で再記すれば次のとおりである。

静岡県中川根町蕎麦粒山山犬段, 1400m (山元照人採集). 愛知県津具村茶臼山, 1415m (Y. Ichimi 採集); 設楽町段戸裏谷, 900m (田中蕃採集); 稲武町井山, 800m (田中蕃採集); 兵庫県養父郡間宮町福定 (遊磨正秀採集); 福岡県英彦山 (黒子浩採集).

本種の和名は、田中ほか(前出)によってミカワキヨトウと命名されているので、それを採用することにしたい。

日本産のキヨトウ群のうちで、雄交尾器の cucullus 内面に corona を有する種を *Aletia* として区分することは、すでに井上・杉(1958: 468-474)によって示されており、本報で扱った3種についてはそのような見解にもとずいて属名 *Aletia* を使用したことを付記する。